

In the Claims:

Please cancel claims 1-22 and add new claims 23-62 as follows:

23. (New) A thin film transistor matrix device comprising:

an insulating substrate;

a plurality of thin film transistors arranged on the insulating substrate in a matrix;

a plurality of picture element electrodes arranged on the insulating substrate in a matrix and connected to the thin film transistors;

a plurality of bus lines for commonly connecting the gates of the thin film transistors, the bus lines being made of a first conducting film;

a first insulating film formed on the first conducting film;

a second conducting film formed on the first insulating film; and

a second insulating film formed on the first insulating film and the second conducting film;

wherein, outside an image display region,

a first contact hole is formed in the first insulating film and the second insulating film through the first conducting film,

a second contact hole is formed in the second insulating film through the second conducting film, and

the first conducting film and the second conducting film electrically connect by a third conducting film which is formed between the first contact hole and the second contact hole on the second insulating film.

24. (New) A thin film transistor matrix device according to claim 23, wherein

a plurality of gate insulating films of the plurality of thin film transistors are made of the first insulating film.

25. (New) A thin film transistor matrix device according to claim 23, wherein

the third conducting film is formed simultaneously with the plurality of picture element electrodes.

26. (New) A thin film transistor matrix device according to claim 23, wherein the third conducting film and the plurality of picture elements are made by Indium Tin Oxide.

27. (New) A thin film transistor matrix device according to claim 23,  
wherein

the first contact hole comprises a first hole of the first insulating film and a  
second hole of the second insulating film, and

an axis of the first hole coincides with an axis of the second hole.

28. (New) A thin film transistor matrix device according to claim 23,  
wherein

the first contact hole comprises a first hole of the first insulating film and a  
second hole of the second insulating film, and

the first contact hole continues from the first hole to the second hole.

29. (New) A thin film transistor matrix device comprising:  
an insulating substrate;  
a plurality of thin film transistors arranged on the insulating substrate in a  
matrix;

a plurality of picture element electrodes arranged on the insulating substrate in  
a matrix and connected to the thin film transistors;

a plurality of bus lines for commonly connecting the gates of the thin film  
transistors, the bus lines being made of a first conducting film;

a first insulating film formed on the first conducting film;  
a first connection line for commonly crossing the plurality of bus lines, the first connection line being made of a second conducting film formed on the first insulating film;  
and  
a second insulating film formed on the first insulating film and the second conducting film,  
wherein, outside an image display region,  
a first contact hole is formed in the first insulating film and the second insulating film through the first conducting film,  
a second contact hole is formed in the second insulating film through the second conducting film, and  
each of the plurality of bus lines is electrically connected to the first connection line through a third conducting film which is formed between the first contact hole and the second contact hole on the second insulating film.

30. (New) A thin film transistor matrix device according to claim 29,  
wherein  
a plurality of gate insulating films of the plurality of thin film transistors are made of the first insulating film.

31. (New) A thin film transistor matrix device according to claim 29,  
wherein  
the third conducting film is formed simultaneously with the plurality of picture  
element electrodes.

32. (New) A thin film transistor matrix device according to claim 31,  
wherein  
the third conducting film and the plurality of picture elements are made by  
Indium Tin Oxide.

33. (New) A thin film transistor matrix device according to claim 29,  
wherein  
the first contact hole comprises a first hole of the first insulating film and a  
second hole of the second insulating film, and  
an axis of the first hole coincides with an axis of the second hole.

34. (New) A thin film transistor matrix device according to claim 29,  
wherein  
the first contact hole comprises a first hole of the first insulating film and a  
second hole of the second insulating film, and

the first contact hole continues from the first hole to the second hole.

35. (New) A thin film transistor matrix device comprising:

an insulating substrate;

a plurality of thin film transistors arranged on the insulating substrate in a matrix;

a plurality of picture element electrodes arranged on the insulating substrate in a matrix and connected to the thin film transistors;

a plurality of gate bus lines for commonly connecting the gates of the thin film transistors, the gate bus lines being made of a first conducting film;

a first insulating film formed on the first conducting film;

a first connection line for commonly crossing the plurality of gate bus lines, the first connection line being made of a second conducting film formed on the first insulating film;

a plurality of drain bus lines for commonly connecting the drains of the thin film transistors, the drain bus lines being made of the second conducting film;

a second connection line for commonly crossing the plurality of drain bus lines, the second connection line being made of the first conducting film; and

a second insulating film formed on the first insulating film and the second conducting film,

wherein, outside an image display region,

a first contact hole is formed in the first insulating film and the second insulating film through the first conducting film,

a second contact hole is formed in the second insulating film through the second conducting film, and

each of the plurality of gate bus lines is electrically connected, through a third conducting film which is formed between the first contact hole and the second contact hole on the second insulating film, to the second connection line through a resistance.

36. (New) A thin film transistor matrix device according to claim 35, wherein

a plurality of gate insulating films of the plurality of thin film transistors are made of the first insulating film.

37. (New) A thin film transistor matrix device according to claim 35, wherein

the third conducting film is formed simultaneously with the plurality of picture element electrodes.

38. (New) A thin film transistor matrix device according to claim 35,

wherein

the third conducting film and the plurality of picture elements are made by Indium Tin Oxide.

39. (New) A thin film transistor matrix device comprising:

an insulating substrate;

a plurality of thin film transistors arranged on the insulating substrate in a matrix;

a plurality of picture element electrodes arranged on the insulating substrate in a matrix and connected to the thin film transistors;

a plurality of gate bus lines for commonly connecting the gates of the thin film transistors, the gate bus lines being made of a first conducting film;

a first insulating film formed on the first conducting film;

a first connection line for commonly crossing the plurality of gate bus lines, the first connection line being made of a second conducting film formed on the first insulating film;

a plurality of drain bus lines for commonly connecting the drains of the thin film transistors, the drain bus lines being made of the second conducting film;

a second connection line for commonly crossing the plurality of drain bus lines, the second connection line being made of the first conducting film; and



a second insulating film formed on the first insulating film and the second conducting film,

wherein, outside an image display region,

a first contact hole is formed in the first insulating film and the second insulating film through the first conducting film,

a second contact hole is formed in the second insulating film through the second conducting film, and

each of the plurality of gate bus lines is electrically connected, through a third conducting film which is formed between the first contact hole and the second contact hole on the second insulating film, to each of the plurality of drain bus lines through a resistance.

40. (New) A thin film transistor matrix device according to claim 39, wherein

a plurality of gate insulating films of the plurality of thin film transistors are made of the first insulating film.

41. (New) A thin film transistor matrix device according to claim 39, wherein

the third conducting film is formed simultaneously with the plurality of picture

element electrodes.

42. (New) A thin film transistor matrix device according to claim 41,  
wherein

the third conducting film and the plurality of picture elements are made by Indium Tin Oxide.

43. (New) A thin film transistor matrix device comprising:  
an insulating substrate;  
a plurality of thin film transistors arranged on the insulating substrate in a matrix;  
a plurality of picture element electrodes arranged on the insulating substrate in a matrix and connected to the thin film transistors;  
a plurality of bus lines for commonly connecting the gates of the thin film transistors, the bus lines being made of a first conducting film;  
a first insulating film formed on the first conducting film;  
a second conducting film formed on the first insulating film, the second conducting film comprising a non-doped Silicon film, a doped  $n^+$ -type Silicon film, and a metal film; and  
a second insulating film formed on the first insulating film and the second

conducting film;

wherein, outside an image display region,

a first contact hole is formed in the first insulating film and the second insulating film through the first conducting film,

a second contact hole is formed in the second insulating film through the second conducting film, and

the first conducting film and the second conducting film electrically connect by a third conducting film which is formed between the first contact hole and the second contact hole on the second insulating film.

44. (New) A thin film transistor matrix device according to claim 43,

wherein

a plurality of gate insulating films of the plurality of thin film transistors are made of the first insulating film.

45. (New) A thin film transistor matrix device according to claim 43,

wherein

the third conducting film is formed simultaneously with the plurality of picture element electrodes.

46. (New) A thin film transistor matrix device according to claim 45,  
wherein  
the third conducting film and the plurality of picture elements are made by  
Indium Tin Oxide.

47. (New) A thin film transistor matrix device according to claim 43,  
wherein  
the first contact hole comprises a first hole of the first insulating film and a  
second hole of the second insulating film, and  
an axis of the first hole coincides with an axis of the second hole.

48. (New) A thin film transistor matrix device according to claim 43,  
wherein  
the first contact hole comprises a first hole of the first insulating film and a  
second hole of the second insulating film, and  
the first contact hole continues from the first hole to the second hole.

49. (New) A thin film transistor matrix device comprising:  
an insulating substrate;  
a plurality of thin film transistors arranged on the insulating substrate in a

matrix;

a plurality of picture element electrodes arranged on the insulating substrate in a matrix and connected to the thin film transistors;

a plurality of bus lines for commonly connecting the gates of the thin film transistors, the bus lines being made of a first conducting film;

a first insulating film formed on the first conducting film;

a first connection line for commonly crossing the plurality of bus lines, the first connection line being made of a second conducting film formed on the first insulating film, the second conducting film comprising a non-doped Silicon film, a doped  $n^+$ -type Silicon film, and a metal film; and

a second insulating film formed on the first insulating film and the second conducting film,

wherein, outside an image display region,

a first contact hole is formed in the first insulating film and the second insulating film through the first conducting film,

a second contact hole is formed in the second insulating film through the second conducting film, and

each of the plurality of bus lines is electrically connected to the first connection line through a third conducting film which is formed between the first contact hole and the second contact hole on the second insulating film.

50. (New) A thin film transistor matrix device according to claim 49,  
wherein

a plurality of gate insulating films of the plurality of thin film transistors are  
made of the first insulating film.

51. (New) A thin film transistor matrix device according to claim 49,  
wherein

the third conducting film is formed simultaneously with the plurality of picture  
element electrodes.

52. (New) A thin film transistor matrix device according to claim 51,  
wherein

the third conducting film and the plurality of picture elements are made by  
Indium Tin Oxide.

53. (New) A thin film transistor matrix device according to claim 49,  
wherein

the first contact hole comprises a first hole of the first insulating film and a  
second hole of the second insulating film, and

an axis of the first hole coincides with an axis of the second hole.

54. (New) A thin film transistor matrix device according to claim 49,  
wherein

the first contact hole comprises a first hole of the first insulating film and a  
second hole of the second insulating film, and

the first contact hole continues from the first hole to the second hole.

55. (New) A thin film transistor matrix device comprising:  
an insulating substrate;  
a plurality of thin film transistors arranged on the insulating substrate in a  
matrix;

a plurality of picture element electrodes arranged on the insulating substrate in  
a matrix and connected to the thin film transistors;

a plurality of gate bus lines for commonly connecting the gates of the thin film  
transistors, the gate bus lines being made of a first conducting film;

a first insulating film formed on the first conducting film;

a first connection line for commonly crossing the plurality of gate bus lines, the  
first connection line being made of a second conducting film formed on the first insulating  
film;

the second conducting film comprising a non-doped Silicon film, a doped  $n^+$  - type Silicon film, and a metal film;

a plurality of drain bus lines for commonly connecting the drains of the thin film transistors, the drain bus lines being made of the second conducting film;

a second connection line for commonly crossing the plurality of drain bus lines, the second connection line being made of the first conducting film; and

a second insulating film formed on the first insulating film and the second conducting film,

wherein, outside an image display region,

a first contact hole is formed in the first insulating film and the second insulating film through the first conducting film,

a second contact hole is formed in the second insulating film through the second conducting film, and

each of the plurality of gate bus lines is electrically connected, through a third conducting film which is formed between the first contact hole and the second contact hole on the second insulating film, to the second connection line through a resistance.

56. (New) A thin film transistor matrix device according to claim 55, wherein

a plurality of gate insulating films of the plurality of thin film transistors are



made of the first insulating film.

57. (New) A thin film transistor matrix device according to claim 55,  
wherein  
the third conducting film is formed simultaneously with the plurality of picture  
element electrodes.

58. (New) A thin film transistor matrix device according to claim 57,  
wherein  
the third conducting film and the plurality of picture elements are made by  
Indium Tin Oxide.

59. (New) A thin film transistor matrix device comprising:  
an insulating substrate;  
a plurality of thin film transistors arranged on the insulating substrate in a  
matrix;  
a plurality of picture element electrodes arranged on the insulating substrate in  
a matrix and connected to the thin film transistors;  
a plurality of gate bus lines for commonly connecting the gates of the thin film  
transistors, the gate bus lines being made of a first conducting film;

a first insulating film formed on the first conducting film;

a first connection line for commonly crossing the plurality of gate bus lines, the first connection line being made of a second conducting film formed on the first insulating film,

the second conducting film comprising a non-doped Silicon film, a doped  $n^+$ -type Silicon film, and a metal film;

a plurality of drain bus lines for commonly connecting the drains of the thin film transistors, the drain bus lines being made of the second conducting film;

a second connection line for commonly crossing the plurality of drain bus lines, the second connection line being made of the first conducting film; and

a second insulating film formed on the first insulating film and the second conducting film,

wherein, outside an image display region,

a first contact hole is formed in the first insulating film and the second insulating film through the first conducting film,

a second contact hole is formed in the second insulating film through the second conducting film, and

each of the plurality of gate bus lines is electrically connected, through a third conducting film which is formed between the first contact hole and the second contact hole on the second insulating film, to each of the plurality of drain bus lines through a resistance.

60. (New) A thin film transistor matrix device according to claim 59, wherein

a plurality of gate insulating films of the plurality of thin film transistors are made of the first insulating film.

61. (New) A thin film transistor matrix device according to claim 59, wherein

the third conducting film is formed simultaneously with the plurality of picture element electrodes.

62. (New) A thin film transistor matrix device according to claim 61, wherein

the third conducting film and the plurality of picture elements are made by Indium Tin Oxide.